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=> b reg
FILE 'REGISTRY' ENTERED AT 16:12:11 ON 16 AUG 2007
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STRUCTURE FILE UPDATES:   15 AUG 2007  HIGHEST RN 944769-12-4
DICTIONARY FILE UPDATES:  15 AUG 2007  HIGHEST RN 944769-12-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

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REGISTRY includes numerically searchable data for experimental and
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on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> d que sta l7
L1              STR
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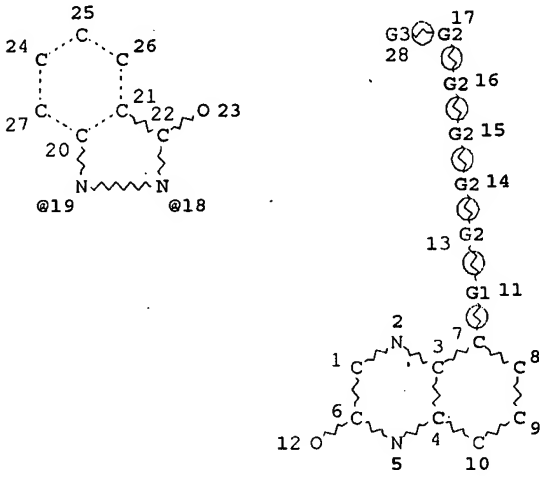


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VAR G2=C/N/O
VAR G3=18/19
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  28

STEREO ATTRIBUTES: NONE
L7          218 SEA FILE=REGISTRY SSS FUL L1

100.0% PROCESSED     472 ITERATIONS                    218 ANSWERS
SEARCH TIME: 00.00.01


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FILE 'HCAPLUS' ENTERED AT 16:12:38 ON 16 AUG 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 16 Aug 2007 VOL 147 ISS 8
FILE LAST UPDATED: 15 Aug 2007 (20070815/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d bib abs hitrn fhitstr l12 tot

L12 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:390252 HCAPLUS
DN 140:406823
TI Preparation of quinoxaline derivatives as Cdk inhibitors
IN Hirai, Hiroshi; Kawanishi, Nobuhiko; Hirose, Masaaki; Sugimoto, Tetsuya; Kamijyo, Kaori; Shibata, Jun; Masutani, Kouta
PA Banyu Pharmaceutical Co., Ltd., Japan
SO PCT Int. Appl., 306 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO2004039809	A1	20040513	2003WO-JP13707	20031027 <--
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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	AU2003275681	A1	20040525	2003AU-0275681	20031027 <--
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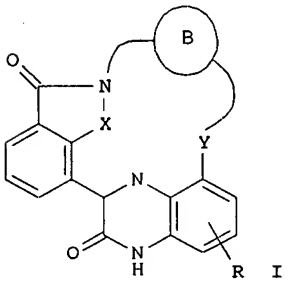
PRAI	2002JP-0313588	A	20021029	<--	
	2003WO-JP13707	W	20031027	<--	

OS MARPAT 140:406823
GI



I

AB The title compds. I [X is NH, S, or the like; Y is O or the like; ring B is -B1(B1')B2(B2')B3(B3')B4(B4')B5(B5')-, etc.; B1 - B5 are each independently CH, N, or the like; and B1' - B5' are each independently hydrogen or the like; and R is hydrogen, lower alkyl, or the like] are prepared Compds. of this invention in vitro showed IC50 values of 1.6 nM to 34 nM against cyclin D2-cdk4.

IT 688806-23-7P 688806-24-8P 688806-25-9P
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688807-98-9P 688807-99-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of quinoxaline derivs. as Cdk inhibitors)

IT 688808-28-8P 688808-29-9P 688808-86-8P
688808-87-9P 688808-88-0P 688808-89-1P
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688809-19-0P 688809-20-3P 688809-21-4P
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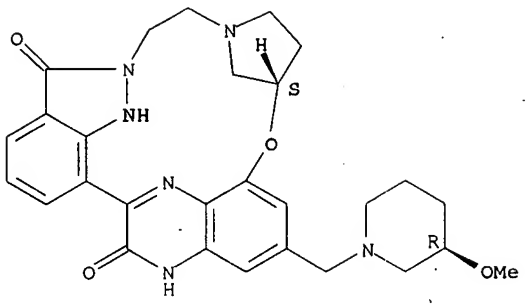
688809-38-3P 688809-39-4P 688809-40-7P
688809-41-8P 689283-08-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of quinoxaline derivs. as Cdk inhibitors)

IT 688806-23-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of quinoxaline derivs. as Cdk inhibitors)

RN 688806-23-7 HCAPLUS

CN 5H,10H-17,19-(Iminomethano)-4,6:9,12-dimethanodibenz[b,f][1,4,8,9,12]oxatetraazacyclopentadecine-20,23-dione, 7,8,11,12-tetrahydro-15-[[(3R)-3-methoxy-1-piperidinyl]methyl]-, monohydrochloride, (12S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

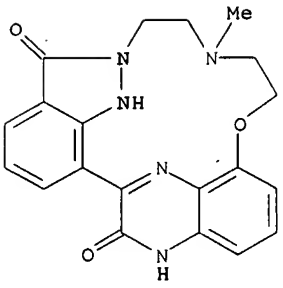


● HCl

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d bib abs hitstr l13 tot

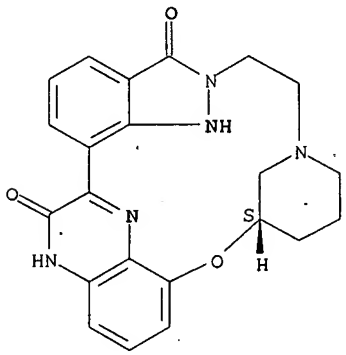
L13 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:874447 HCAPLUS
DN 145:448576
TI Structure-based drug design of a highly potent CDK1,2,4,6 inhibitor with novel macrocyclic quinoxalin-2-one structure
AU Kawanishi,.Nobuhiko; Sugimoto, Tetsuya; Shibata, Jun; Nakamura, Kaori; Masutani, Kouta; Ikuta, Mari; Hirai, Hiroshi
CS Department of Medicinal Chemistry, Banyu Tsukuba Research Institute in collaboration with Merck Research Laboratories, Tsukuba, Ibaraki, 300-2611, Japan
SO Bioorganic & Medicinal Chemistry Letters (2006), 16(19), 5122-5126
CODEN: BMCLE8; ISSN: 0960-894X
PB Elsevier Ltd.
DT Journal
LA English
OS CASREACT 145:448576
AB The design of a novel series of cyclin-dependent kinase (CDK) inhibitors containing a macrocyclic quinoxaline-2-one is reported. Structure-based drug design and optimization from the starting point of diarylurea 2, which we previously reported as a moderate CDK1,2,4,6 inhibitor, led to the discovery of potent CDK1,2,4,6 inhibitor that were suitable for iv administration for in vivo study.
IT **913375-38-9 913375-39-0 913375-40-3**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(structure-based drug design of highly potent CDK1,2,4,6 inhibitor with macrocyclic quinoxalinone structure)
RN 913375-38-9 HCAPLUS
CN 7H-16,18-(Iminomethano)-4,6-methano-5H-dibenz[i,m][1,4,7,8,12]oxatetraazacyclotetradecine-19,21-dione, 8,9,10,11-tetrahydro-9-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 913375-39-0 HCAPLUS
CN 18,20-(Iminomethano)-4,6:9,13-dimethano-5H-dibenz[b,f][1,4,8,9,12]oxatetra azacyclohexadecine-21,24-dione, 7,8,10,11,12,13-hexahydro-, (13S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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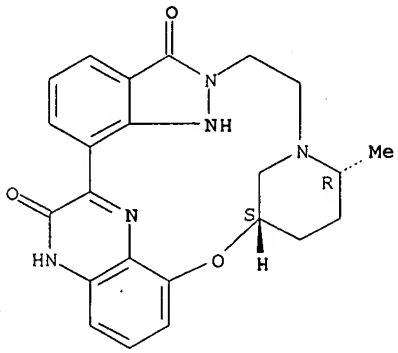
CN 18,20-(Iminomethano)-4,6:9,13-dimethano-5H-dibenz[b,f][1,4,8,9,12]oxatetra azacyclohexadecine-21,24-dione, 7,8,10,11,12,13-hexahydro-10-methyl-, (10R,13S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 16:13:03 ON 16 AUG 2007
CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

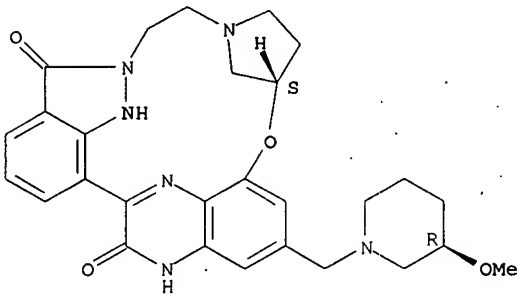
=> d bib abs fhitstr l14 tot

L14 ANSWER 1 OF 1 USPATFULL on STN
AN 2006:22125 USPATFULL
TI Novel quinoxalinone derivatives
IN Hirai, Hiroshi, c/o Banyu Pharmaceutical Co., Ltd., Tsukuba Research Institute, 3, Okubo, Tusukuba-shi, Ibaraki, JAPAN 300-2611
Kawanishi, Nobuhiko, Tsukuba, JAPAN
Hirose, Masaaki, Tsukuba, JAPAN
Sugimoto, Tetsuya, Tsukuba, JAPAN
Kamijyo, Kaori, Tsukuba, JAPAN
Shibata, Jun, Tsukuba, JAPAN
Masutani, Kouta, Tsukuba, JAPAN
PA Banyu Pharmaceutical Co., Ltd. Tsukuba Research Institute, Ibaraki, JAPAN, 300-2611 (non-U.S. corporation)
PI US-20060019959 A1 20060126
AI 2003US-000532677 A1 20031027 (10)
2003WO-JP00013707 20031027
20050615 PCT 371 date
PRAI 2002JP-000313588 20021029
DT Utility
FS APPLICATION
LREP WENDEROTH, LIND & PONACK, L.L.P., 2033 K STREET N. W., SUITE 800, WASHINGTON, DC, 20006-1021, US
CLMN Number of Claims: 18
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 6099
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A quinoxalinone derivative of the formula (I): ##STR1## or a pharmaceutically acceptable salt or ester thereof, wherein; X is NH, S or the like; Y is O or the like; the partial structure ##STR2## is, for example, the formula: ##STR3##

B.sub.1, B.sub.2, . . . , B.sub.n-1 and B.sub.n, (in which n is 4, 5 or 6) are each independently CH, N or the like;
B'.sub.1, B'.sub.2, . . . , B'.sub.n-1 and B'.sub.n (in which n is 4, 5 or 6) are each independently hydrogen or the like; and R is hydrogen, lower alkyl or the like.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **688806-23-7P**
(preparation of quinoxaline derivs. as Cdk inhibitors)
RN 688806-23-7 USPATFULL
CN 5H,10H-17,19-(Iminomethano)-4,6:9,12-dimethanodibenz[b,f][1,4,8,9,12]oxatetraazacyclopentadecine-20,23-dione, 7,8,11,12-tetrahydro-15-[[(3R)-3-methoxy-1-piperidinyl]methyl]-, monohydrochloride, (12S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

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L2           1 US20060019959/PN OR (US2005-532677 OR JP2002-313588 OR WO2003-J

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L7           218 L1 FULL
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L8           121 L7 AND L4
L9            97 L7 NOT L8

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L13            1 L11 NOT L12

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